

# Use modified primers in PCR

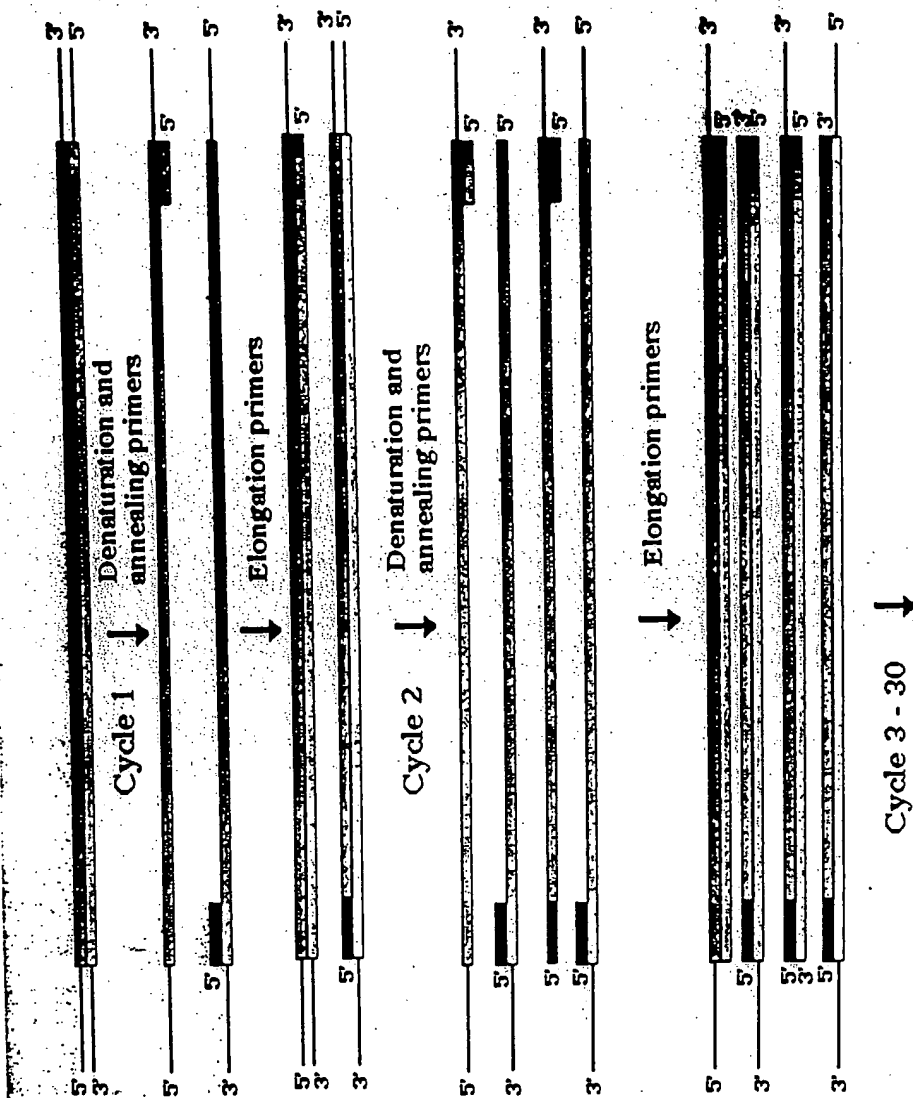
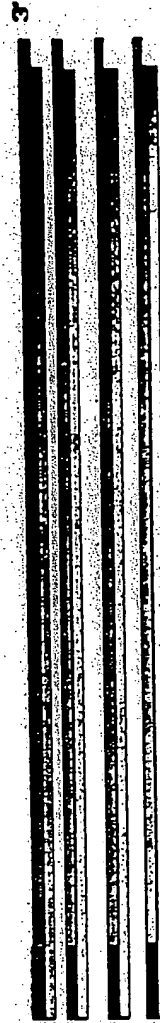


Fig. 1

**After PCR the end of primer can be removed**



**Treatment to remove end of primer segment**

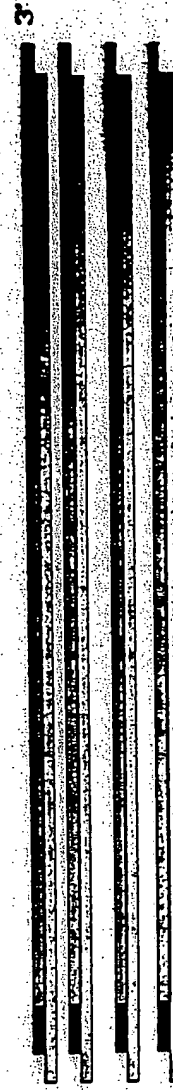


**Fig. 2**

**The protruding ends can be made at one or both ends of the PCR fragment**



**Treatment to remove end of primer segment**



**Fig. 3**

A biotin can be attached to the end of a DNA fragment  
then ligations can be done sequentially with the DNA  
attached to the bead

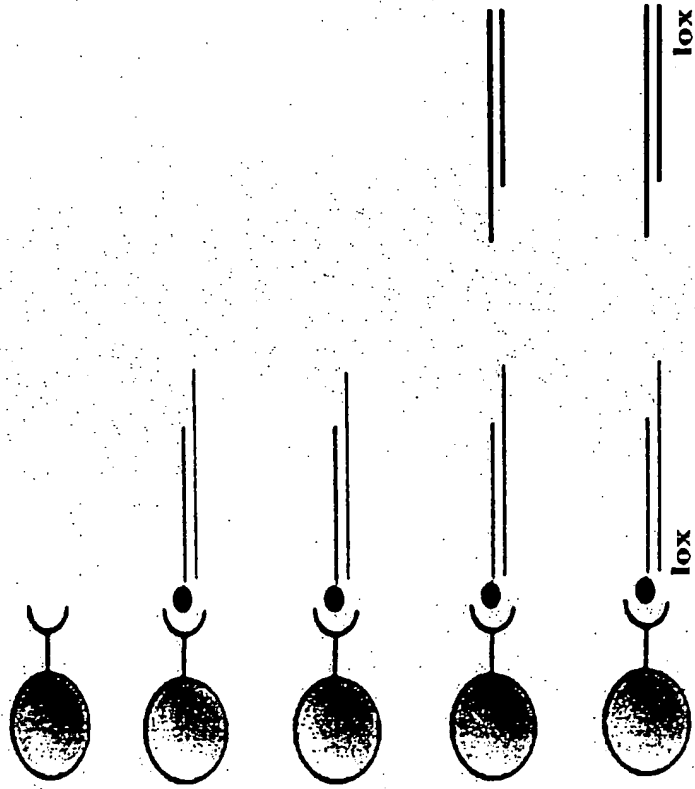


Fig. 4

## **Using an enzyme system to remove the DNA from the bead and circularize it**

- By introducing a lox site in the DNA near the ends the DNA can be acted upon by the cre recombination enzyme
- By having replication and selection functions on the DNA between the lox sites the circularized DNA will form a functional plasmid capable of transforming cells

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Fig. 5

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